

TMDL IMPLEMENTATION PLAN

NEW RIVER

Submitted by Chattahoochee-Flint RDC

In furtherance of Georgia Environmental Protection Division contract #751-10102. The preparation of this document was financed in part through a grant from the U.S. Environmental Protection Agency under the Provisions of Section 604(b) of the Federal Water Pollution Control Act, as amended.

April 9, 2001

**STATE OF GEORGIA
TMDL IMPLEMENTATION PLAN
NEW RIVER, COWETA & HEARD COUNTIES, GEORGIA**

Background

New River, which flows through Coweta and Heard Counties, Georgia, has a beneficial water use classification of fishing and is currently listed as an impaired water body. The target TMDL for New River is set at 175 cfu/100ml. Achieving this level will allow the water body to be removed from the 303(d) list.

The TMDL is the total amount of pollutant that can be assimilated by the receiving water body while achieving water quality standards. Section 303(d) of the Federal Clean Water Act and EPA's Water Quality Planning and Management Regulations (40 CFR Part 130) require states to develop total daily maximum load (TMDL) management plans for the water bodies that do not meet designated uses under technology-based controls for pollution. The TMDL process establishes the allowable loadings of pollutants or other quantifiable parameters for a water body based on the relationship between pollution sources and in-stream water quality conditions, so that states can establish water-quality based controls to reduce pollution from both point and nonpoint sources and restore and maintain the quality of their water resources (USEPA, 1991). For bacteria such as fecal coliform, loads are expressed in terms of cells per 100ml of water.

A general implementation plan outlining mitigating activities to be established in the New River Watershed is included in this document. The purpose of this plan is to reduce or eliminate the pollutants contained in the runoff into New River. The implementation plan will be carried out with full participation of all interested parties. The implementation plan is to be considered a living document. In the process of carrying out the plans additional water quality data will be generated and the results will be integrated into the plans. Load capacity will be adjusted, for example, if new data indicates that the targets used are not appropriate or if new standards are adopted.

Existing TMDL and Monitoring Data

The source of data used for the development of this plan was the TMDL document. The levels indicated in the TMDL document are based on a model run for 1987 and 1988 critical time periods using 'calibrated' fecal and flow parameters. The representative critical summer time period used was May through October 1987 and the representative critical winter time period was November 1987 through April 1988. This model resulted in a summer fecal coliform 30-day geometric mean of 210cfu/100ml. This is 35 cfu/100ml above the target level of 175 cfu/100ml.

More data is needed to identify sources of nonpoint pollution within the watershed. Local expertise and involvement from environmental agencies, federal agencies, schools and universities, and other sources will play a critical role in identifying and reducing the levels of fecal coliform in New River.

Land Use

New River watershed encompasses 34.4 square miles (22,308 acres) in the northern portions of Heard and Coweta Counties, Georgia. Agricultural use accounts for 22% of land use within the watershed. The remaining 78% is distributed between forest (73%), barren land (4%), and urban uses (1%).

Potential nonpoint sources of fecal coliform are numerous and often occur in combination. The greatest rural nonpoint sources of fecal coliform are generally associated with animal operations, in which large quantities of fecal matter are generated.

Existing Regulatory or Voluntary Action

Both Coweta and Heard Counties have regulatory measures in place that affect water quality in New River. Coweta County's Stream Corridor Protection District is in place to assure that significant streams in the county, such as New River, will not become polluted and unsuitable as sources of potable water. In addition, Coweta's Flood Damage Protection Ordinance states, "Agricultural practices shall not impair the drinking quality of water as defined in the Federal Clean Drinking Water Act". Heard County's Flood Overlay District also regulates land use in flood hazard zones.

Georgia is in the process of implementing a watershed approach to water resource management through River Basin Management Planning. River basin planning is the foundation for implementation of water protection strategies in Georgia. This approach provides the framework and schedule for actions to address the waters of Georgia 303 (d) list. The basin planning program is based on legislation in 1992 (O.C.G.A. 12-5-520) by the Georgia Assembly that calls for EPD to develop river basin management plans for each of the major river basins in Georgia. The Chattahoochee River Basin Management Plan was adopted in 1997.

The Natural Resource Conservation Service (NRCS), Georgia Soil and Water Conservation Commission (GSWCC), and Georgia Forestry Commission (GFC) are actively disseminating information on Best Management Practices (BMPs) within the New River Watershed. NRCS's focus is on BMPs targeted at erosion and sedimentation control and agricultural practices, GSWCC does consulting on all BMP applications for all land use types and GFC focuses on BMPs for forestry. In addition, Rolling Hills Resource Conservation and Development District (RC&D) runs the Poultry Litter/ Dead Bird Management Program in Coweta County, which offers cost sharing with poultry producers to mitigate fecal coliform contamination from runoff.

Recommended Regulatory or Voluntary Actions

Implementation of measures to address the TMDL involves the cooperation of all landowners and land users in the watershed. Broad awareness and involvement are essential to the success of the implementation plan. Through careful land use planning and the use of best management practices, the impacts of storm water runoff can be minimized. Storm water runoff can be improved through methods like erosion control and the establishment of green spaces, parklands and stream buffers.

Heard and Coweta Counties are in the process of amending their Zoning Ordinances to comply with more stringent state requirements. This includes amending the Soil Erosion and Storm Water Ordinances to implement state National Pollution Discharge Elimination System (NPDES) requirements and their Soil Erosion Ordinance to include recommendations of the Erosion and Sedimentation Control Technical Study Committee (DIRT II). The Implementation Plan also recommends that both counties expand the Nutrient Management Program run through their respective County Cooperative Extension Services to include fecal coliform reduction. Coweta County also expects to establish and adopt the New River Water Supply Watershed Overlay District in the next five years.

The implementation plan recommends four additions to the Heard County Zoning Ordinance. It calls for an amendment to the Flood Hazard Overlay District to include language about water

quality and an expansion of the Chattahoochee River Corridor Protection District to include the protection for tributaries. The plan also recommends adopting a Wetlands Ordinance and a River Corridor Protection Overlay Zone and establishing an Adopt-A-Stream program for New River.

Implementation Plan Schedule

The Implementation Plan for New River Watershed contains a work plan outlining the tasks to be accomplished during Phase I of the program (years 1 through 5).

A stakeholder group for New River Watershed has been identified. During the first year, this group will meet and determine how it will function to best achieve its goals. The stakeholders group must work together to identify additional remedial measures and sources of funding needed for their implementation. Management programs must be established and/or expanded as well as implemented during this first year. Educational programs focused at schools, interest groups and landowners will be developed and implemented during the first year. Monitoring and status reports of fecal coliform levels will be implemented during the first year. Work will also begin on detecting and eliminating any illicit discharges.

After the first year, work will continue throughout Phase I in the following areas: implementing and educational and outreach programs, detecting and eliminating illicit discharges, evaluation of additional management controls, monitoring and evaluating progress, and providing period progress reports. If the fecal coliform levels remain above the targeted level during the fourth year of the plan, the process to develop a more stringent Phase II plan should begin during the fifth year. The projected attainment date is ten years from the acceptance of this implementation plan by the EPD.

Monitoring Plan

Monitoring is a critical component in determining the success of the implementation plan. Monitoring helps assess compliance with regulations, major sources of loading and the effect of regulatory and voluntary measures implemented in the drainage basin. No two watersheds are alike. Therefore, in determining actual fecal coliform levels, it is essential to rely on monitoring of particular watersheds rather on computer modeling.

The EPD will monitor levels of fecal coliform in New River in 2005. Additionally, the West Georgia Watershed Assessment will monitor annually for wastewater assessment, and the Departments Health for both counties will monitor yearly for septic system assessment.

Criteria to Determine Progress

Progress in meeting the goals of the Implementation Plan will be determined through analysis of water quality sampling results. Periodic monitoring will show the trends of fecal coliform levels throughout the five-year period. The number of regulatory controls or best management practices implemented in the New River Watershed will also serve as a measure of progress. The implementation plan will be considered successful if the TMDL level for New River meets the target TMDL level and the stream is removed from the 303 (d) list.

Conclusion

The development and implementation of an effective TMDL plan is critical to the environmental health of Coweta and Heard Counties. Removal of New River from the 303 (d) list and compliance with the Federal Clean Water Act is in the best possible environmental and economic interest of the both counties. Without the success of the TMDL Implementation Plan the local governments within each county could face difficulty in areas such as the expansion or development of wastewater treatment facilities and the location of industries that may contribute to increased levels of fecal coliform.

STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN FOR: :

New River
(STREAM)Fecal coliform
(PARAMETER)RIVER BASIN: Chattahoochee
PLAN DATE: March 31,2001

Prepared by: Chattahoochee-Flint Regional Development Center Address: 13273 GA Hwy 34 E, P.O. Box 1600 City: Franklin State: GA Zip: 30217-1600 e-mail: Inicholas@cfrdc.org Date Submitted to EPD: 03-29-01		Or Prepared By: Address: _____ City: _____ State: _____ Zip: _____ e-mail: _____ Date Submitted to EPD: _____					
General Information Obtain this information from the TMDL document or other information. When completed, this document will be a self-contained report independent of the TMDL document.		Significant Stakeholders Identify local governments, agricultural organizations or significant land holders, commercial forestry organizations, businesses and industries, and local organizations including environmental groups with a major interest in this water body.					
TMDL ID (to be entered by EPD)		Name/Organization	Heard County				
Water body name	New River	Address	PO Box 40				
HUC basin name	New River	City	Franklin	State	GA	Zip	30217
HUC number	0313000205	Phone	(706)675-3821			e-mail	
Primary county	Coweta	Name/Organization	City of Grantville				
Secondary county	Heard	Address	PO Box 160				
Primary RDC	Chattahoochee-Flint	City	Grantville	State	GA	Zip	30220
Secondary RDC		Phone	770-358-2298			e-mail	
Water body location	Coweta County	Name/Organization	City of Moreland				
	Heard County	Address	PO Box 158				
Miles or area impacted	24	City	Moreland	State	GA	Zip	30259
Parameter addressed in plan	Fecal coliform bacteria	Phone	770-251-3428			e-mail	
Water use classification	Fishing	Name/Organization	Rolling Hills RC&D				
Degree of impairment	Partially supporting use <input checked="" type="checkbox"/>	Address	203 Legion Road				
	Not supporting use <input type="checkbox"/>	City	Dallas	State	GA	Zip	30132
Date TMDL approved by EPA		Phone	770-505-4288			e-mail	
Impairment due to	Point sources <input type="checkbox"/>	Name/Organization	Coweta County Cattleman's Assoc				
	Nonpoint sources <input checked="" type="checkbox"/>	Address	PO Box 819				
	Both <input type="checkbox"/>	City	Newnan	State	GA	Zip	30264
Point source-Form A; Nonpoint source-Form B; Both-Form A+B+C		Phone	770-254-2620			e-mail	

Stakeholders continued on last page

SUMMARY OF ALLOCATION MODEL RESULTS FROM TMDL DOCUMENT (existing load, target TMDL, and needed reduction)

EXISTING LOAD	TARGET TMDL	NEEDED REDUCTION
210 cfu/100 ml	175 cfu/100 ml	35 cfu/100 ml

I. IDENTIFY NONPOINT SOURCE CATEGORIES AND SUBCATEGORIES OR INDIVIDUAL SOURCES WHICH MUST BE CONTROLLED TO IMPLEMENT LOAD ALLOCATIONS:

List major nonpoint sources contributing to impairment including those identified in TMDL document

SOURCE	DESCRIPTION OF CONTRIBUTION TO IMPAIRMENT	RECOMMENDED LOAD REDUCTION (FROM TMDL)
Agriculture or pasture land uses	100% contribution to the impairment. Important loads are associated with animal operations in which large quantities of fecal mater are generated or spread on fields. Loads may also be associated with the land application of municipal sludge.	30%

II. DESCRIBE ANY REGULATORY OR VOLUNTARY ACTIONS INCLUDING MANAGEMENT MEASURES OR OTHER CONTROLS BY GOVERNMENTS OR INDIVIDUALS THAT SPECIFICALLY APPLY TO THE POLLUTANT AND THE WATERBODY FOR WHICH THE TMDL WAS WRITTEN, THAT WILL BE ACCOMPLISHED THROUGH RELIABLE AND EFFECTIVE DELIVERY MECHANISMS, AND THAT WILL HELP ACHIEVE THE LOAD ALLOCATIONS IN THE TMDL:

A. Existing or required regulatory actions

RESPONSIBLE GOVERNMENT, ORGANIZATION OR ENTITY	NAME OF REGULATION/ORDINANCE	DESCRIPTION	ENACTED OR PROJECTED DATE	STATUS
Coweta County	Stream Corridor Protection District	To assure that significant streams in the county will not become polluted and unsuitable as sources of potable water.	1990	Active
Coweta County	Flood Damage Protection Ordinance	States “ Agricultural practices shall not impair the drinking quality of the water as defined in the Federal Clean Drinking Water Act”.	1990	Active
Heard County	Flood Hazard Overlay District	Regulates land use in flood hazard zone	2000	Active

B. Existing voluntary actions

RESPONSIBLE ORGANIZATION OR ENTITY	NAME OF ACTION	DESCRIPTION	ENACTED OR PROJECTED DATE	STATUS
Rolling Hills Resource Conservation and Development District	Poultry Litter/ Dead Bird Management Program	Cost sharing with poultry producers to mitigate fecal coliform contamination from runoff	06-01	Grant pending
Georgia Forestry Commission	BMP's for forestry	Disseminating information to interested individuals and organizations		Ongoing
Natural Resource Conservation Service	BMP's for agriculture	Disseminating information to interested individuals and organizations		Ongoing
Natural Resource Conservation Service	BMP's for Erosion and Sediment Control	Disseminating information to interested individuals and organizations		Ongoing
Georgia Soil & Water Conservation Commission	Consulting on BMPs	Disseminating information to interested individuals and organizations		Ongoing
Coweta Extension Service	Adopt-A-Stream	Involving 4-H, Scouts, Cattle Growers on water quality monitoring	5-01	Training

C. Additional recommended regulatory or other measures which should be implemented to reduce the loads of the TMDL parameter

ENTITY/ORGANIZATION RESPONSIBLE	NAME OF PROPOSED REGULATION/ORDINANCE/ OTHER	DESCRIPTION	ENACTED / PROJECTED DATE	STATUS
Heard County	Amendment to the Flood Hazard Overlay District	Amend to include the statement "Agricultural practices shall not impair the drinking quality of the water as defined in the Federal Clean Drinking Water Act".	10-01	Under review
Heard County	Amend Chattahoochee River Corridor Protection District	Include regulation of land use along tributaries	10-01	Under review
Heard County	Wetlands Ordinance	Wetlands protection? If not adopt a wetlands ordinance	10-01	Under review
Heard County	River Corridor Protection Overlay Zone	River corridor protection	10-01	Under review
Coweta County	New River Water Supply Watershed District	Regulates land use and requires the maintenance of setbacks and natural buffers	06-04	Understudy
Heard County	NDPES Permits	Amend soil erosion and storm water ordinances to implement state NPDES requirements	08-02	Under review
Coweta County	NDPES Permits	Amend soil erosion and storm water ordinances to implement state NPDES requirements	08-02	Under review
Coweta County Cooperative Extension Service	Nutrient Management Plans	Expand the program to include fecal coliform reduction	09-02	Under study
Heard County Cooperative Extension Service	Nutrient Management Plans	Expand the program to include fecal coliform reduction	09-02	Under study

III. SCHEDULE FOR IMPLEMENTING MANAGEMENT MEASURES OR OTHER CONTROL ACTIONS:

These must be implemented as expeditiously as practicable within five years of when the implementation plan is accepted by EPA.

IMPLEMENTATION ACTION*	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Form stakeholders group	X				
Organize implementation work with stakeholders and local officials to identify remedial measures and potential funding sources	X				
Identify sources of TMDL parameter	X				
Develop management programs to control runoff including identification and implementation of BMPs (Phase I):	X				
Agriculture					
Forestry					
Urban					
Mining					
Organize and implement education and outreach programs	X	X	X	X	X
Detect and eliminate illicit discharges	X	X	X	X	X
Evaluate additional management controls needed	X	X	X	X	X
Monitor and evaluate results	X	X	X	X	X
Reassess TMDL allocations		X	X	X	X
Provide periodic status reports on implementation of remedial activities	X	X	X	X	X
If needed, begin process for Phase II (next 5 years) and subsequent phases				X	X
* This schedule may be revised after meeting with the regional Water Issues Committee and stakeholders					

IV. PROJECTED ATTAINMENT DATE AND BASIS FOR THAT PROJECTION:

The projected attainment date is 10 years from acceptance of the implementation plan by EPA.

V. MEASURABLE MILESTONES:

- Number of management controls and activities already implemented 9
- Number of management controls and activities proposed in five-year work program 9
- Number of management controls and activities actually implemented in five-year work period _____(to be completed after 5 years)
- Stream sampled to identify areas of concern See monitoring plan

VI. MONITORING PLAN:

Monitoring data that placed stream on 303(d) list will be provided if requested.

Previous or current sampling activities or other surveys to detect sources or to measure effectiveness of management measures or other controls

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
West GA. Watershed Assessment	2000-2003	Fecal coliform	Wastewater Assessment	Ongoing
Coweta County Dept of Environmental Health	2000-2005	Fecal coliform	Septic System Assessment	Ongoing
Heard County Health Department	2000-2005	Fecal coliform	Septic System Assessment for Heard County	Ongoing

Planned or proposed sampling activities or other surveys

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
EPD	2001	Multiple	Basin planning	Ongoing

VII. CRITERIA TO DETERMINE WHETHER SUBSTANTIAL PROGRESS IS BEING MADE:

- % concentration or load change (monitoring program)
- Categorical change in classification of the stream (delisting the stream is the goal)
- Regulatory controls or activities installed (ordinances, laws)
- Best management practices installed (agricultural, forestry, urban)

COMMENTS

Additional Stakeholders: Heard County, PO Box 40, Franklin, GA 30217 (706)675-3821
Coweta County , 22 East Broad St, Newnan, GA 30263 (770)254-2606
West GA Poultry Growers' Assoc, PO Box 338, Carrollton, GA 30117, 770-836-6646
Coweta County Dept. of Environmental Health, 137 Jackson St, Newnan, GA 30263 770-254-7400